

## **II. AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims**

1. (Currently amended) A method for solution-mining a subterranean material in an elbow well having a single cavity, said method comprising:  
  
    injecting a fluid into said elbow well through only a single opening disposed at a terminal end of an injection tube, said fluid forming a subterranean mixture with said subterranean material in said single cavity; and  
  
    collecting said subterranean mixture from said elbow well.
2. (Previously amended) The method of claim 1, wherein said subterranean material comprises trona.
3. (Previously amended) The method of claim 1, further comprising making said elbow well.
4. (Previously amended) The method of claim 3, wherein said making said elbow well comprises drilling an elbow well into a bed comprising said subterranean material.
5. (Previously amended) The method of claim 1, wherein said method further comprises casing said elbow well.

6. (Previously amended) The method of claim 1, wherein said injecting a fluid further comprises injecting said fluid into an injection tube located in said elbow well.
7. (Cancelled)
8. (Previously amended) The method of claim 1, wherein said single cavity comprises said subterranean material mixture after said injecting said fluid.
9. (Previously amended) The method of claim 1, wherein said subterranean mixture comprises a subterranean solution.
10. (Previously amended) The method of claim 1, wherein said fluid comprises water.
11. (Previously amended) The method of claim 1, wherein said fluid comprises a caustic mixture.
12. (Previously amended) The method of claim 1, wherein said method further comprises heating said fluid.
13. (Previously amended) The method of claim 1, wherein said collecting said subterranean mixture further comprises collecting said subterranean mixture through a production tube located in said elbow well.

14. (Previously amended) The method of claim 1, wherein said collecting said subterranean mixture comprises pumping said subterranean mixture.

15. (Previously amended) The method of claim 14, wherein said pumping said subterranean mixture comprises lifting said subterranean mixture through a production tube.

16. (Previously amended) The method of claim 15, wherein said method further comprises delivering said subterranean mixture to a collection location.

17. (Previously amended) The method of claim 16, wherein said collection location comprises the earth's surface.

18. (Previously amended) The method of claim 14, wherein said method further comprises placing a pump in said elbow well.

19. (Previously amended) The method of claim 1, wherein said method occurs at ambient well pressure.

20. (Previously amended) The method of claim 1, wherein said method further comprises processing said subterranean mixture after said collecting said subterranean mixture.

21. (Currently amended) A system for solution-mining a subterranean material in an elbow well having a single cavity, said system comprising:

an injection means for injecting a fluid into said elbow well through only a single opening disposed at a terminal end of said injection means, said fluid forming a subterranean mixture with said subterranean material in said single cavity; and

a collection means for collecting said subterranean mixture from said elbow well.

22. (Previously amended) The system of claim 21, wherein said subterranean material comprises trona.

23. (Cancelled)

24. (Cancelled)

25. (Previously amended) The system of claim 21, wherein said system further comprises a means for casing said elbow well.

26. (Previously amended) The system of claim 21, wherein said means for injecting said fluid further comprises an injection tube located in said elbow well.

27. (Previously amended) The system of claim 21, wherein said subterranean mixture comprises a subterranean solution.

28. (Previously amended) The system of claim 21, wherein said fluid comprises water.

29. (Previously amended) The system of claim 21, wherein said fluid comprises a caustic mixture.

30. (Cancelled)

31. (Previously amended) The system of claim 21, wherein said means for collecting said subterranean mixture comprises a means for pumping said subterranean mixture.

32. (Previously amended) The system of claim 31, wherein said system further comprises a means for placing a pump in said elbow well.

33. (Previously amended) The system of claim 31, wherein said system further comprises a means for delivering said subterranean mixture to a collection location.

34. (Previously amended) The system of claim 33, wherein said collection location comprises the earth's surface.

35. (Previously amended) The system of claim 21, wherein said system operates at ambient well pressure.

36. (Cancelled)

37. (Currently amended) An apparatus for solution-mining a subterranean material in an elbow well having a single cavity, said apparatus comprising:

an injection tube, wherein said injection tube has an ~~injection tube~~ inner diameter of sufficient size to allow for injection of a fluid through only a single opening disposed at a terminal end of said injection tube ~~for mining a subterranean material~~; and

a production casing, wherein said production casing has a production casing inner diameter of sufficient size to allow for production of a subterranean mixture of said fluid and said subterranean material between an outer surface of said injection tube and an inner surface of said production casing.

38. (Previously amended) The apparatus of claim 37, further comprising a production tube for collecting said subterranean mixture.

39. (Previously amended) The apparatus of claim 38, further comprising a pump connected to said production tube.